

FACT SHEET FOR NPDES PERMIT WA0040991
FACILITY NAME: PACIFIC COAST SHREDDING
SUMMARY

Issuance Date: _____

TABLE OF CONTENTS

INTRODUCTION	1
BACKGROUND INFORMATION	2
DESCRIPTION OF THE FACILITY	2
Industrial Process	2
Discharge Outfall	2
PERMIT STATUS	2
SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT	2
WASTEWATER CHARACTERIZATION	2
SEPA COMPLIANCE	2
PROPOSED PERMIT LIMITATIONS	4
TECHNOLOGY-BASED EFFLUENT LIMITATIONS	4
SURFACE WATER QUALITY-BASED EFFLUENT LIMITATIONS	5
Numerical Criteria for the Protection of Aquatic Life	6
Numerical Criteria for the Protection of Human Health	6
Narrative Criteria	6
Antidegradation	6
Critical Conditions	6
Mixing Zones	6
Description of the Receiving Water	7
Surface Water Quality Criteria	8
Consideration of Surface Water Quality-Based Limits for Numeric Criteria	9
Whole Effluent Toxicity	11
Human Health	12
Sediment Quality	13
Summary of Proposed Permit Limitations	13
BENCHMARK VALUES	13
ENDANGERED SPECIES	14
MONITORING REQUIREMENTS	16
EFFLUENT LIMITS BELOW QUANTITATION	16
LAB ACCREDITATION	16
OTHER PERMIT CONDITIONS	16
REPORTING AND RECORD KEEPING	16
OPERATION AND MAINTENANCE MANUAL	16
OUTFALL EVALUATION	16
NEARSHORE EVALUATION	17
STORMWATER POLLUTION PREVENTION PLAN	17
ENGINEERING REPORT	17
COMPLIANCE SCHEDULE	17

FACT SHEET FOR NPDES PERMIT WA0040991

GENERAL CONDITIONS	17
PERMIT ISSUANCE PROCEDURES	17
PERMIT MODIFICATIONS	17
RECOMMENDATION FOR PERMIT ISSUANCE	17
REFERENCES FOR TEXT AND APPENDICES.....	18
APPENDIX A--PUBLIC INVOLVEMENT INFORMATION	19
APPENDIX B--GLOSSARY	20
APPENDIX C--TECHNICAL CALCULATIONS	23
APPENDIX D--RESPONSE TO COMMENTS	24
GENERAL COMMENTS	24

INTRODUCTION

The Federal Clean Water Act (FCWA, 1972, and later modifications, 1977, 1981, and 1987) established water quality goals for the navigable (surface) waters of the United States. One of the mechanisms for achieving the goals of the Clean Water Act is the National Pollutant Discharge Elimination System of permits (NPDES permits), which is administered by the Environmental Protection Agency (EPA). The EPA has delegated responsibility to administer the NPDES permit program to the State of Washington on the basis of Chapter 90.48 RCW which defines the Department of Ecology's authority and obligations in administering the wastewater discharge permit program.

The regulations adopted by the State include procedures for issuing permits (Chapter 173-220 WAC), water quality criteria for surface and ground waters (Chapters 173-201A and 200 WAC), and sediment management standards (Chapter 173-204 WAC). These regulations require that a permit be issued before discharge of wastewater to waters of the state is allowed. The regulations also establish the basis for effluent limitations and other requirements which are to be included in the permit. One of the requirements (WAC 173-220-060) for issuing a permit under the NPDES permit program is the preparation of a draft permit and an accompanying fact sheet. Public notice of the availability of the draft permit is required at least thirty days before the permit is issued (WAC 173-220-050). The fact sheet and draft permit are available for review (see Appendix A--Public Involvement of the fact sheet for more detail on the Public Notice procedures).

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in this review have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. The fact sheet will not be revised. Comments and the resultant changes to the permit will be summarized in Appendix D--Response to Comments.

<u>GENERAL INFORMATION</u>	
Applicant	Pacific Coast Shredding
Facility Name and Address	901 Port Way, Vancouver WA
Type of Facility:	Scrap and Waste Materials (Automobile Shredding for Scrap)
SIC Code	5093
Discharge Location	Waterbody name: Columbia River Latitude: 45° 37' 45" N Longitude: 122° 41' 15" W.
Water Body ID Number	WA-CR-1010

BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

INDUSTRIAL PROCESS

Pacific Coast Shredding is an automobile shredder and recycler. The industrial process includes an initial inspection to confirm that the automobile fluids have been drained, mechanical shredding, separation using magnets, and final separation by gravity. The company sells the resulting stocks of ferrous and non-ferrous scrap metal and pays to dispose of the non-metal residual (“auto-fluff”). Pacific Coast Shredding has been operating at the site since 1999.

DISCHARGE OUTFALL

Stormwater is pumped from a sub-surface collection system to an above ground holding tank, flows by gravity through an oil water separator and discharges via gravity flow through a diffuser in the Columbia River.

PERMIT STATUS

Ecology permits the stormwater discharge now under the State’s NPDES General Permit for Stormwater Dischargers Associated with Industrial Activity. This is a new individual permit.

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

The facility is in compliance with the terms of the State’s NPDES General Permit for Industrial Activity. However, the wastewater characterization data shows the potential for violating receiving water quality standards to a degree that the Department is issuing the facility this individual permit.

WASTEWATER CHARACTERIZATION

The proposed wastewater discharge is characterized for the parameters listed in Table 1.

SEPA COMPLIANCE

Under RCW 43.21C.0383, “the issuance, reissuance, or modification of a waste discharge permit that contains conditions no less stringent than federal effluent limitations and state rules is not subject to the requirements of RCW [43.21C.030](#)(2)(c). This exemption applies to existing discharges only and does not apply to new source discharges.” Because this is an existing discharge covered under permit, and because the permit contains conditions no less stringent than federal effluent limitations and state rules, the issuance of the permit is exempt from RCW 43.21C.030 (2)(c). Ecology meets that statute’s objectives of environmental analysis and public involvement through preparation of this fact sheet and solicitation of public comment. (Appendix A).

Table 1 Wastewater Characterization Data, Pacific Coast Shredders

Parameter	Number of Samples	Maximum Concentration	Average Concentration
Oil and Grease (mg/l)	12	62	20
Biochemical Oxygen Demand (mg/l)	1	323	323
Chemical Oxygen Demand (mg/l)	1	805	805
Total Suspended Solids (mg/l)	12	232	110
Total Kjeldahl Nitrogen (mg/l)	1	4	4
Total Phosphorus (mg/l)	1	0.55	0.55
pH (s.u.)	12	7	7
Cadmium (µg/l)	12	11.9	8
Chromium (µg/l)	12	59	24
Copper (µg/l)	12	216	105
Lead (µg/l)	12	594	266
Mercury (µg/l)	12	2.5	1
Nickel (µg/l)	4	41	Not Reported
Zinc (µg/l)	12	5390	3403
PCB – 1242 (µg/l)	12	12	4
PCB – 1254 (µg/l)	12	0.65	Not Detected
Benzene (µg/l)	1	11	11
Toluene (µg/l)	1	85	85
Ethylbenzene (µg/l)	1	26	26
m,p-Xylene (µg/l)	1	100	100
o-Xylene (µg/l)	1	49	49
Whole Effluent Toxicity - Survival	40% Survival of Fathead Minnow in 100% Effluent		

PROPOSED PERMIT LIMITATIONS

Federal and State regulations require that effluent limitations set forth in a NPDES permit must be either technology- or water quality-based. Technology-based limitations are based upon the treatment methods available to treat specific pollutants. Technology-based limitations are set by regulation or developed on a case-by-case basis (40 CFR 125.3, and Chapter 173-220 WAC). Water quality-based limitations are based upon compliance with the Surface Water Quality Standards (Chapter 173-201A WAC), Ground Water Standards (Chapter 173-200 WAC), Sediment Quality Standards (Chapter 173-204 WAC) or the National Toxics Rule (Federal Register, Volume 57, No. 246, Tuesday, December 22, 1992). The more stringent of these two limits must be chosen for each of the parameters of concern. Each of these types of limits is described in more detail below.

The limits in this permit are based in part on information received in the application. The effluent constituents in the application were evaluated on a technology- and water quality-basis. The limits necessary to meet the rules and regulations of the State of Washington were determined and included in this permit. Ecology does not develop effluent limits for all pollutants that may be reported on the application as present in the effluent. Some pollutants are not treatable at the concentrations reported, are not controllable at the source, are not listed in regulation, and do not have a reasonable potential to cause a water quality violation. Effluent limits are not always developed for pollutants that may be in the discharge but not reported as present in the application. In those circumstances the permit does not authorize discharge of the non-reported pollutants. Effluent discharge conditions may change from the conditions reported in the permit application. If significant changes occur in any constituent, as described in 40 CFR 122.42(a), the Permittee is required to notify the Department of Ecology. The Permittee may be in violation of the permit until the permit is modified to reflect additional discharge of pollutants.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

Technology-based effluent limits are permit limits established for categories of industry that are based on the ability of a treatment method to reduce pollutant concentrations. EPA has not established technology-based effluent limits for stormwater discharges associated with scrap recycling facilities.

In Washington State, discharges must apply “All Known, Available and Reasonable Methods of prevention, control and Treatment (AKART) to discharges. Ecology generally accepts the application of best management practices as AKART for stormwater discharges associated with industry.

Schnitzer Steel in Tacoma, an auto shredder also regulated under individual permit, uses best management practices, flow equalization, oil/water separation, chemical coagulation and flocculation, and settling, to meet effluent limits Ecology set for the discharge to protect receiving waters (Table 2). Schnitzer Steel has demonstrated its ability to meet its limits (Table 3). Hence, technology-based effluent limits based upon the values in Table 2 or Table 3 may be feasible for this industry.

Table 2 Schnitzer Steel Effluent Limits

Parameter	Effluent Limit Average Monthly	Effluent Limit Maximum Daily
Copper	130 g/L	170 µg/L
Lead	280 µg/L	370 µg/L
Zinc	1090 µg/L	1550 µg/L
PCBs	5 µg/L	7 µg/L
Oil and Grease	10 mg/L	15 µg/L
pH	6- 9	6-9

Table 3 Schnitzer Steel Performance Data

Parameter	Average Monthly Data 95 th Percentile Value	Maximum Daily Data 99 th Percentile Value
TSS	62 mg/L	97 mg/L
Copper	59 ug/L	99 ug/L
Lead	150 ug/L	210 ug/L
Zinc	498 ug/L	937 ug/L
PCBs	1 ug/L	1 ug/L

For Oil and Grease, Ecology requires stormwater discharges under individual permits to meet average monthly effluent limits of 10 mg/L and maximum daily effluent limits of 15 mg/l. These limits are commonly achieved using oil-water separators. The proposed permit contains these limits as final limits and a compliance schedule for meeting them. The permit also contains interim limits that will be in effect until the discharger is in compliance with final limits (Table 4). Interim limits are “performance-based limits;” that is, these limits are based on existing demonstrated performance, calculated using procedures described in EPA’s Technical Support Document for Water Quality-Based Toxics Control and the Department’s Permit Writer’s Manual (Appendix C).

Table 4 Final and Interim Effluent Limits for Oil and Grease

Parameter	Final Avg. Monthly Limit	Final Max. Daily Limit	Interim Avg. Monthly Limit	Interim Max. Daily Limit
Oil and Grease	10 mg/L	15 mg/L	35 ug/L	55 mg/L

SURFACE WATER QUALITY-BASED EFFLUENT LIMITATIONS

In order to protect existing water quality and preserve the designated beneficial uses of Washington’s surface waters, WAC 173-201A-060 states that waste discharge permits shall be conditioned such that the discharge will meet established Surface Water Quality Standards. The Washington State Surface Water Quality Standards (Chapter 173-201A WAC) is a state regulation designed to protect the beneficial uses

of the surface waters of the state. Surface water quality-based effluent limitations may be based on an individual waste load allocation (WLA) or on a WLA developed during a basin wide total maximum daily loading study (TMDL).

NUMERICAL CRITERIA FOR THE PROTECTION OF AQUATIC LIFE

"Numerical" water quality criteria are numerical values set forth in the State of Washington's Water Quality Standards for Surface Waters (Chapter 173-201A WAC). They specify the levels of pollutants allowed in receiving water while remaining protective of aquatic life. Numerical criteria set forth in the Water Quality Standards are used along with chemical and physical data for the wastewater and receiving water to derive the effluent limits in the discharge permit. When surface water quality-based limits are more stringent or potentially more stringent than technology-based limitations, they must be used in a permit.

NUMERICAL CRITERIA FOR THE PROTECTION OF HUMAN HEALTH

The U.S. EPA has promulgated 91 numeric water quality criteria for the protection of human health that are applicable to Washington State (EPA 1992). These criteria are designed to protect humans from cancer and other disease and are primarily applicable to fish and shellfish consumption and drinking water from surface waters.

NARRATIVE CRITERIA

In addition to numerical criteria, "narrative" water quality criteria (WAC 173-201A-030) limit toxic, radioactive, or deleterious material concentrations below those which have the potential to adversely affect characteristic water uses, cause acute or chronic toxicity to biota, impair aesthetic values, or adversely affect human health. Narrative criteria protect the specific beneficial uses of all fresh (WAC 173-201A-130) and marine (WAC 173-201A-140) waters in the State of Washington.

ANTIDEGRADATION

The State of Washington's Antidegradation Policy requires that discharges into receiving water shall not further degrade the existing water quality of the water body. In cases where the natural conditions of receiving water are of lower quality than the criteria assigned, the natural conditions shall constitute the water quality criteria. Similarly, when the natural conditions of a receiving water are of higher quality than the criteria assigned, the natural conditions shall constitute the water quality criteria. More information on the State Antidegradation Policy can be obtained by referring to WAC 173-201A-070.

The Department has reviewed existing records and is unable to determine if ambient water quality is either higher or lower than the designated classification criteria given in Chapter 173-201A WAC; therefore, the Department will use the designated classification criteria for this water body in the proposed permit. The discharges authorized by this proposed permit should not cause a loss of beneficial uses.

CRITICAL CONDITIONS

Surface water quality-based limits are derived for the water body's critical condition, which represents the receiving water and waste discharge condition with the highest potential for adverse impact on the aquatic biota, human health, and existing or characteristic water body uses.

MIXING ZONES

The Water Quality Standards allow the Department of Ecology to authorize mixing zones around a point of discharge in establishing surface water quality-based effluent limits. Both "acute" and "chronic"

mixing zones may be authorized for pollutants that can have a toxic effect on the aquatic environment near the point of discharge. The concentration of pollutants at the boundary of a mixing zone may not exceed the numerical water quality standard. Mixing zones can only be authorized for discharges that are receiving all known, available, and reasonable methods of prevention, control and treatment (AKART) and in accordance with other mixing zone requirements of WAC 173-201A-100.

Pollutant concentrations in this discharge exceed water quality criteria with technology-based controls which the Department has determined to be AKART. The Department is therefore authorizing a mixing zone in accordance with provisions of Chapter 173-201A-100 WAC for estuaries that have the flow characteristics of rivers (unidirectional flow).

DESCRIPTION OF THE RECEIVING WATER

The facility discharges to the Columbia River which is designated as a Class A receiving water in the vicinity of the outfall. Characteristic uses of Class A waters include the following: water supply (domestic, industrial, agricultural); stock watering; fish migration; fish and shellfish rearing, spawning and harvesting; wildlife habitat; primary contact recreation; sport fishing; boating and aesthetic enjoyment; commerce and navigation. Water quality of this class shall meet or exceed the requirements for all or substantially all uses.

Point source outfalls in this area of the river include: Evergreen Aluminum LLC, Boise Cascade, GATX Terminals, Fort Vancouver Plywood, Northwest Packers, Great Western Malting, Ideal Basin Industries, and the City of Vancouver's West Side Wastewater Treatment Plant. Nearby non-point sources of pollutants include dischargers from within the City of Vancouver.

Effluent limits contained in the point source permits suggest that none are significant contributors of the type of pollutants discharged by Pacific Coast Shredders, with the exception of BOD and TSS discharges from the City (Table 5). Copper, lead and zinc associated with stormwater dischargers from within the City of Vancouver are likely contributors of the type of pollutants discharged by Pacific Coast Shredders as these pollutants are commonly found in urban stormwater runoff.

Table 5 Point Source Dischargers in the Vicinity of Pacific Coast Shredders

Facility	Activity	Discharge	Permitted or Design Flow	Pollutants
Evergreen	Aluminum Smelting	Cooling Water	1.4 MGD	Fl, Al, pH, BOD, TSS, FC
Boise Cascade	Paper Coating	Process Water	6.7 MGD	BOD, TSS, pH
GATX Terminals	Chemical Storage	Stormwater	9.8 MGD	pH, TOS
Ft. Vancouver Plywood	Sawmill	Stormwater, Cooling Water	Not Specified	Temp, SS
Great Western Packing	Grain Malting	Cooling Water	Not Specified	Chlorine, Temp, pH
Ideal Basin Industrials		Cooling Water	Not Specified	
Vancouver WWTP	Municipal Wastewater Treatment		28 MGD	BOD, TSS, FC, pH

SURFACE WATER QUALITY CRITERIA

Applicable criteria are defined in Chapter 173-201A WAC for aquatic biota while U.S. EPA has promulgated applicable human health criteria (EPA 1992). Water quality criteria for metals are based on dissolved fractions (Table 6).

Table 6 Numeric Water Quality Standards

Pollutant	Acute Criteria ug/L	Chronic Criteria μ g/L	Human Health Criteria μ g/L
Copper	8.7	6.2	
Lead	29	1.2	
Mercury	2.1	0.012	
Zinc	62	57	
Aroclor – 1242 (a PCB)	2	0.014	0.00017
Total PCBs	2	0.014	0.00017

CONSIDERATION OF SURFACE WATER QUALITY-BASED LIMITS FOR NUMERIC CRITERIA

Pollutants in an effluent may affect the aquatic environment near the point of discharge (near field) or at a considerable distance from the point of discharge (far field). Toxic pollutants, for example, are near-field pollutants--their adverse effects diminish rapidly with mixing in the receiving water. Conversely, a pollutant such as BOD is a far-field pollutant whose adverse effect occurs away from the discharge even after dilution has occurred. Thus, the method of calculating surface water quality-based effluent limits varies with the point at which the pollutant has its maximum effect.

The derivation of surface water quality-based limits takes into account the discharge flow rate, the concentration of pollutants in the discharge, the receiving water flow rate, the concentration of pollutants in the receiving water, and the variability of the pollutant concentrations in both the effluent and the receiving water during critical or design conditions.

We defined the critical effluent discharge using recommended values in Ecology's permit writer's manual, except that flows during acute discharge conditions were reduced to account for storage at the facility (Table 7). We calculated effluent concentrations using a statistically derived maximum expected concentration, per recommendations in Ecology's Permit Writer's Manual and EPA guidance. We assumed that ambient concentrations during critical conditions are the 90th percentile values of the critical discharge season data. The critical condition for the Columbia River is the seven day average low river flow with a recurrence interval of ten years (7Q10), as defined by WAC 173-201A.

We obtained ambient data representative of this critical condition in the vicinity of the outfall from the City of Vancouver's West Side Treatment Plant Mixing Zone study, an engineering report prepared by the Pacific Coast Shredding's consulting engineers, and published reports from the United States Geological Survey. We calculated dilution factors at the critical conditions using of UM3, a mixing zone model within the Visual Plumes software developed and maintained by the United States Environmental Protection Agency. In establishing the dilution factor, we used the flux-average dilution. In calculating final limits, we set all metal translators to "1" to ensure protection of aquatic sediments.

Toxic Pollutants--Federal regulations (40 CFR 122.44) require NPDES permits to contain effluent limits for toxic chemicals in an effluent whenever there is a reasonable potential for those chemicals to exceed the surface water quality criteria. This process occurs concurrently with the derivation of technology-based effluent limits. Facilities with technology-based effluent limits defined in regulation are not exempted from meeting the Water Quality Standards for Surface Waters or from having surface water quality-based effluent limits.

The discharger reported in the permit application that the following toxic compounds are present in the discharge: cadmium, chromium, copper, lead, mercury, nickel, zinc, polychlorinated biphenyls (Arochlor compounds), benzene, toluene, and ethylbenzene. We conducted a reasonable potential analysis on these parameters at critical discharge conditions to determine if effluent limitations would be required in this permit, using methods described in EPA's Technical Support Document for Water Quality-Based Toxics Control (EPA/505/2-90-001) and the Department's Permit Writer's Manual (Ecology Publication 92-109) (Appendix C).

Table 7 Data at Critical Conditions and Dilution Factors

Parameter	Acute Critical Condition	Chronic Critical Condition	Human Health Critical Condition
Columbia River			
7Q10 low flow	81,672 cfs	81,672 cfs	
Harmonic Flow			159,000 cfs
Velocity	0.01 m/sec ¹	0.14 m/sec ¹	0.14 m/sec ¹
Depth	9.2 feet	11.2 feet	11.2 feet
Hardness	49 mg/L as CaCO ₃		
Copper	2.0 ug/L		
Zinc	2.2 ug/L		
Other Contaminants	0.0		
Discharge			
Storm Event	2 Year, 6-Hour ²	2-Year, 72-Hour	2-Year, 72-Hour
Discharge (cfs)	1.3 cfs ²	0.33 cfs	0.33 cfs
Effluent Mixing			
Dilution Factors	21:1	194:1	194:1
Crit. Eff. Conc. ³	5%	0.5%	0.5%
<p>Notes</p> <ol style="list-style-type: none"> 1. Velocity measurements were made during a flow of 116,000 cfs. The Department accepts these velocities as representative of critical conditions for compliance with acute, chronic and human health standards. 2. Detention storage limits discharges to a value (1.3 cfs) that is likely less than the 2-Year, 6-Hour peak 1-hour flow rate 3. The Critical Effluent Concentration, defined as the maximum concentration of effluent during critical conditions at the boundary of the zone of acute criteria exceedance, is equal to 1 / the dilution factor. 			

Based upon the reasonable potential analysis, we determined that copper, lead, mercury, zinc and PCBs have a reasonable potential to cause a violation of the Water Quality Standards. As a result, we calculated effluent limits for these pollutants (Table 8), again using methods described in EPA and Ecology guidance (Appendix C).

The proposed permit contains a compliance schedule for meeting the water quality-based limits for these pollutants and interim limits as required by Chapter 173-201A WAC. Interim limits are “performance-based limits;” that is, these limits are based on existing demonstrated performance, calculated using the EPA and Ecology guidance. Because the performance-based limit for Arochlor 1254 (1.0 ug/L) is more restrictive than the effluent limit calculated to meet water quality standards (4.5 ug/L), the performance-based limit will be the final effluent limit. Final Maximum Daily Limits for Arochlor 1242 and 1254 (4.5

ug/L and 1.0 ug/L) are superseded by the final human health based effluent limit for Total PCBs, discussed below.

Table 8 Final and Interim Effluent Limits for Toxic Pollutants

Parameter	Final Maximum Daily Limit	Interim Maximum Daily Limit
Copper	140 ug/L	220 ug/L
Lead	370 ug/L	530 ug/L
Mercury	4 ug/L	6.5 ug/L
Zinc	1270 ug/L	5070 ug/L
Arochlor 1242		8 ug/L
Arochlor 1254		3 ug/L

pH – WAC 173-201A specifies that the pH of Class A waters shall be within the range of 6.5 to 8.5. The pH of the discharge falls within this range. The permit contains these standards as limits to ensure that the water quality standard for pH continues to be met.

WHOLE EFFLUENT TOXICITY

The Water Quality Standards for Surface Waters require that the effluent not cause toxic effects in the receiving waters. Many toxic pollutants cannot be detected by commonly available detection methods. However, toxicity can be measured directly by exposing living organisms to the wastewater in laboratory tests and measuring the response of the organisms. Toxicity tests measure the aggregate toxicity of the whole effluent, and therefore this approach is called whole effluent toxicity (WET) testing. Some WET tests measure acute toxicity and other WET tests measure chronic toxicity.

Acute toxicity tests measure mortality as the significant response to the toxicity of the effluent. Dischargers who monitor their wastewater with acute toxicity tests are providing an indication of the potential lethal effect of the effluent to organisms in the receiving environment.

Chronic toxicity tests measure various sub-lethal toxic responses such as retarded growth or reduced reproduction. Chronic toxicity tests often involve either a complete life cycle test of an organism with an extremely short life cycle or a partial life cycle test on a critical stage of one of a test organism's life cycles. Organism survival is also measured in some chronic toxicity tests.

In accordance with WAC 173-205-040, the Permittee's effluent has been determined to have the potential to contain toxic chemicals. The proposed permit contains requirements for acute whole effluent toxicity testing as authorized by RCW 90.48.520 and 40 CFR 122.44 and in accordance with procedures in Chapter 173-205 WAC.

The proposed permit requires the Permittee to conduct toxicity testing for one year in order to characterize the acute toxicity of the effluent. The permit delays effluent characterization for WET until the date the discharger must comply with final water quality standards. WAC 173-205-030(4) allows the Department to delay effluent characterization for WET for existing facilities that are under a compliance

schedule in a permit to implement technology-based controls or to achieve compliance with surface water quality-based effluent limits.

If acute toxicity is measured during effluent characterization at levels that, in accordance with WAC 173-205-050(2) (a), have a reasonable potential to cause receiving water toxicity, then the proposed permit will set a limit on the acute toxicity. The proposed permit will then require the Permittee to conduct WET testing in order to monitor for compliance with an acute toxicity limit. The proposed permit also specifies the procedures the Permittee must use to come back into compliance if the limits are exceeded.

When the WET tests during effluent characterization indicate that no reasonable potential exists to cause receiving water toxicity, the Permittee will not be given WET limits and will only be required to retest the effluent prior to application for permit renewal in order to demonstrate that toxicity has not increased in the effluent.

If the Permittee makes process or material changes which, in the Department's opinion, results in an increased potential for effluent toxicity, then the Department may require additional effluent characterization in a regulatory order, by permit modification, or in the permit renewal. Toxicity is assumed to have increased if WET testing conducted for submission with a permit application fails to meet the performance standards in WAC 173-205-020, "whole effluent toxicity performance standard". The Permittee may demonstrate to the Department that changes have not increased effluent toxicity by performing additional WET testing after the time the process or material changes have been made.

Accredited WET testing laboratories have the proper WET testing protocols, data requirements, and reporting format. Accredited laboratories are knowledgeable about WET testing and capable of calculating an NOEC, LC₅₀, EC₅₀, IC₂₅, etc. All accredited labs have been provided the most recent version of the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* which is referenced in the permit. Any Permittee interested in receiving a copy of this publication may call the Ecology Publications Distribution Center 360-407-7472 for a copy. Ecology recommends that Permittees send a copy of the acute or chronic toxicity sections(s) of their permits to their laboratory of choice.

HUMAN HEALTH

Washington's water quality standards include 91 numeric health-based criteria that must be considered in NPDES permits. These criteria were promulgated for the state by the U.S. EPA in its National Toxics Rule (Federal Register, Volume 57, No. 246, Tuesday, December 22, 1992).

Using EPA and Ecology guidance and as required by 40 CFR 122.44(d), we determined that this discharge has a reasonable potential to cause an exceedance of human health-based water quality standards for Total PCBs. As a result, we calculated and placed into the permit final and interim effluent limits for those chemicals (Table 9). Interim limits are the sum of the individual interim limits for Arochlor 1242 and 1254 described previously (Table 7).

Table 9 Final and Interim Effluent Limits for Total PCBs

Parameter	Final Maximum Daily Limit	Interim Maximum Daily Limit
Total PCBs	0.05 ug/L	11 ug/L

SEDIMENT QUALITY

The Department has been unable to determine at this time the potential for this discharge to cause a violation of sediment quality standards. If the Department determines in the future that there is a potential for violation of the Sediment Quality Standards, an order will be issued to require the Permittee to demonstrate that either the point of discharge is not an area of deposition or, if the point of discharge is a depositional area, that there is not an accumulation of toxics in the sediments.

SUMMARY OF PROPOSED PERMIT LIMITATIONS

The permit contains the following final and interim effluent limits to protect water quality in the Columbia River, as described above (Table 10). The permit provides for a compliance schedule to meet the final effluent limits. **The final limit for Total PCBs is lower than the quantification level for individual PCB isomers. As a result, the QLs for the individual PCB isomers will be used for assessment of compliance with the final effluent limit for Total PCBs**

Table 10 Final Effluent Limits and Interim Performance-Based Limits

Parameter	Final Maximum Daily Limit	Final Average Monthly Limit	Interim Maximum Daily Limit	Interim Average Monthly Limit
pH	Daily minimum is equal to or greater than 6 and the daily maximum is less than or equal to 9			
Oil & Grease	15 mg/L	10 mg/L	55 mg/L	35 mg/L
Copper	140 ug/L		220 ug/L	
Lead	370 ug/L		530 ug/L	
Mercury	4 ug/L		6.5 ug/L	
Zinc	1270 ug/L		5070 ug/L	
Arochlor 1242			7.7 ug/L	
Arochlor 1254			1.0 ug/L	
Total PCBs	0.05 ug/L		8.7 ug/L	

BENCHMARK VALUES

EPA established benchmark values for this industry in its *Multi-Sector General Permits for Storm Water Discharges Associated with Industrial Activities* (Table 9). According to the EPA permit, benchmark values are not effluent limits, but exceedance of these values “does signal that modifications to the SWPPP may be necessary. In addition, exceedance of benchmark values may identify facilities that would be more appropriately covered under an individual or alternative general permit where more specific pollution prevention controls could be required.”

To address TSS and COD in the discharge, Ecology is placing in this permit the benchmark values for COD contained in EPA's *NPDES Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activities*. If discharge concentrations exceed the benchmark value, the discharger must inspect the site, ensure that all Best Management Practices identified in the SWPPP and improvements described in the Engineering Report are fully and consistently implemented, and notify the department of the exceedance and corrective actions taken as a result of the inspection.

The Department will not enforce on failure to attain these values. Rather, the Department may enforce on failure of the discharger, in response to the exceedance, to notify the department, conduct a follow-up inspection, and fully and consistently implement BMPS and improvements described in the Engineering Report.

Table 11 Bench-mark values for automobile shredders:

Parameter	Benchmark Value
Chemical Oxygen Demand (COD)	120 mg/L
Total Suspended Solids (TSS)	100 mg/L

ENDANGERED SPECIES

There are several species of salmonids that likely use or pass through or near the area of the discharge during downstream and upstream migrations. Table 10 presents summary information on the species that are protected under the Endangered Species Act, the associated Evolutionary Significant Units or Distinct Population Segments (for Bull Trout and Cutthroat Trout), and listing status.

NMFS published a final ESA Section 4d rule protecting several of these species on July 10, 2000, and protects other species via earlier 4d rules. Under the July 2000 4d rule, the ESA Section 9 prohibition on take of endangered species applies to Lower Columbia River Chinook, Columbia River Chum, Snake River Steelhead, Lower Columbia River Steelhead, Middle Columbia River Steelhead, and Upper Columbia River Steelhead. The July 2000 4d rule also identifies 13 exceptions (limits) to the Section 9 take prohibitions. Wastewater discharges and permits authorizing discharges are not among the 13 activities that NMFS identified for exception to Section 9 prohibitions. Instead, the Take Guidance published with the 4d rule describes the discharge of pollutants as one of twelve activities that "as a general rule may be most likely to result in injury or harm to listed salmonids." The rule emphasizes that:

Table 12 ESA Protected Salmonids in the Area of the Discharge

Species	ESU / DPS	Status
Chinook	Snake River Spring/Summer	Threatened
	Snake River Fall	Threatened
	Lower Columbia River	Threatened
	Upper Columbia River Spring	Endangered
Chum	Columbia River	Threatened
Sockeye	Snake River	Endangered
Steelhead	Snake River	Threatened
	Lower Columbia River	Threatened

FACT SHEET FOR NPDES PERMIT WA0040991

	Middle Columbia River	Threatened
	Upper Columbia River	Endangered
Coho	Lower Columbia River & SW Washington	Candidate
Bull Trout	Columbia River	Threatened
Cut. Trout	Columbia River & SW Washington	Proposed Threatened

“Whether injury or harm is resulting from a particular activity is entirely dependent upon the facts and circumstances of each case. The mere fact that an activity may fall within one of these categories does not at all mean that that specific activity is causing harm or injury. These types of activities are, however, those that may be most likely to cause harm and thus violate this rule. NMFS’ ESA enforcement will therefore focus on these categories of activities.” The 4d rule became effective on January 8, 2001 (65 FR 42421).

This permit protects protected salmonids by requiring that the discharge reduce the concentration of pollutants in the discharge to ensure that water quality standards are met in the Columbia River during conservative design conditions: a historic low river flow (7Q10) in combination with a high discharge event. Additionally, locating the diffuser away from the shoreline area reduces the chances of juveniles coming into contact with discharges within the mixing zone, where water quality standards will be exceeded.

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are required (WAC 173-220-210 and 40 CFR 122.41) to verify that the treatment process is functioning correctly and the effluent limitations are being achieved.

The monitoring schedule is detailed in the proposed permit under Condition S.2. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

EFFLUENT LIMITS BELOW QUANTITATION

The health-based effluent limit for Total PCBs in the wastewater is below the capability of current analytical technology to quantify. The Quantitation Level is the level at which concentrations can be reliably reported with a specified level of error. For individual and total PCBs, the Quantification Level is 0.2 ug/L. In the summation to determine Total PCBs, values reported as NQ will be given a value of 0. For maximum daily effluent limits, if the measured effluent concentration is below the Quantitation Level, the Permittee reports NQ for non-quantifiable.

LAB ACCREDITATION

With the exception of certain parameters the permit requires all monitoring data to be prepared by a laboratory registered or accredited under the provisions of Chapter 173-50 WAC, *Accreditation of Environmental Laboratories*.

OTHER PERMIT CONDITIONS

REPORTING AND RECORD KEEPING

Reporting and record keeping conditions are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-220-210).

OPERATION AND MAINTENANCE MANUAL

In accordance with state and federal regulations, the Permittee is required to take all reasonable steps to properly operate and maintain the treatment system (40 CFR 122.41(e)) and WAC 173-220-150 (1)(g). An operation and maintenance manual will submitted as required by state regulation for the construction of wastewater treatment facilities (WAC 173-240-150).

OUTFALL EVALUATION

The permit requires the Permittee to conduct a biennial inspection of the outfall area, take corrective actions to ensure that the diffuser and discharge pipe can function as designed, and notify the Department of the findings of the inspection and any corrective actions taken. The purpose of the inspection is to determine the condition of the discharge pipe and diffusers and to evaluate the extent of sediment accumulations in the vicinity of the outfall.

FACT SHEET FOR NPDES PERMIT WA0040991

NEARSHORE EVALUATION

The permit requires the Permittee to conduct a biennial inspection of all nearshore loading areas, remove any metal debris found on the river bed, and notify the Department of the findings of the inspection and cleanup.

STORMWATER POLLUTION PREVENTION PLAN

The permit requires the Permittee to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) to limit discharges of pollutants to waters. The SWPPP will include provisions for preventing the accidental release of chemicals stored at the site to state waters and minimizing damages if such a spill occurs.

ENGINEERING REPORT

The permit requires the Permittee to submit an engineering report that describes the improvements needed to meet final effluent limits.

COMPLIANCE SCHEDULE

The permit contains a compliance schedule requiring the discharger to meet interim and final effluent limits.

GENERAL CONDITIONS

General Conditions are based directly on state and federal law and regulations and have been standardized for all individual industrial NPDES permits issued by the Department.

PERMIT ISSUANCE PROCEDURES

PERMIT MODIFICATIONS

The Department may modify this permit to impose numerical limitations, if necessary to meet Water Quality Standards for Surface Waters, Sediment Quality Standards, or Water Quality Standards for Ground Waters, based on new information obtained from sources such as inspections, effluent monitoring, outfall studies, and effluent mixing studies. The Department may also modify this permit as a result of new or amended state or federal regulations.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics, protect human health, aquatic life, and the beneficial uses of waters of the State of Washington. The Department proposes that this proposed permit be issued for five years.

REFERENCES FOR TEXT AND APPENDICES

Environmental Protection Agency (EPA)

2000. NPDES Multi-Sector General Permit for Storm Water Discharges Associated With Industrial Activities.

1992. National Toxics Rule. Federal Register, V. 57, No. 246, Tuesday, December 22, 1992.

1991. Technical Support Document for Water Quality-based Toxics Control. EPA/505/2-90-001.

1983. Water Quality Standards Handbook. USEPA Office of Water, Washington, D.C.

Washington State Department of Ecology (Ecology).

2002. Permit Writer's Manual. Publication Number 92-109

APPENDIX A--PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to issue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public notice of application was published on July 14, 2002 and July 21, 2002 in *The Columbian* to inform the public that an application had been submitted and to invite comment on the issuance of this permit.

The Department will publish a Public Notice of Draft (PNOD) on October 13, 2003 in *The Columbian* to inform the public that a draft permit and fact sheet are available for review. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments should be mailed to:

Industrial Permit Coordinator
Department of Ecology
Southwest Regional Office
PO Box 47775
Olympia, WA 98504-4775
Attn.: Water Quality Program

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30) day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-220-090). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing (WAC 173-220-100).

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department will consider all comments received within thirty (30) days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, 360-407-6280, or by writing to the address listed above.

This permit and fact sheet were written by Greg Zentner.

APPENDIX B--GLOSSARY

Acute Toxicity--The lethal effect of a compound on an organism that occurs in a short period of time, usually 48 to 96 hours.

AKART-- An acronym for "all known, available, and reasonable methods of treatment".

Ambient Water Quality--The existing environmental condition of the water in a receiving water body.

Ammonia--Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation --The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass--The intentional diversion of waste streams from any portion of a treatment facility.

Chlorine--Chlorine is used to disinfect wastewaters of pathogens harmful to human health. It is also extremely toxic to aquatic life.

Chronic Toxicity--The effect of a compound on an organism over a relatively long time, often 1/10 of an organism's lifespan or more. Chronic toxicity can measure survival, reproduction or growth rates, or other parameters to measure the toxic effects of a compound or combination of compounds.

Clean Water Act (CWA)--The Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, 97-117; USC 1251 et seq.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample--A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity--Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Continuous Monitoring --Uninterrupted, unless otherwise noted in the permit.

Critical Condition--The time during which the combination of receiving water and waste discharge conditions have the highest potential for causing toxicity in the receiving water environment. This situation usually occurs when the flow within a water body is low, thus, its ability to dilute effluent is reduced.

Dilution Factor--A measure of the amount of mixing of effluent and receiving water that occurs at the boundary of the mixing zone. Expressed as the inverse of the percent effluent fraction e.g., a dilution factor of 10 means the effluent comprises 10% by volume and the receiving water 90%.

Engineering Report--A document which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Fecal Coliform Bacteria--Fecal coliform bacteria are used as indicators of pathogenic bacteria in the effluent that are harmful to humans. Pathogenic bacteria in wastewater discharges are controlled by disinfecting the wastewater. The presence of high numbers of fecal coliform bacteria in a water body can indicate the recent release of untreated wastewater and/or the presence of animal feces.

Grab Sample--A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial Wastewater--Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Major Facility--A facility discharging to surface water with an EPA rating score of > 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Maximum Daily Discharge Limitation--The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

Minor Facility--A facility discharging to surface water with an EPA rating score of < 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Mixing Zone--An area that surrounds an effluent discharge within which water quality criteria may be exceeded. The area of the authorized mixing zone is specified in a facility's permit and follows procedures outlined in state regulations (Chapter 173-201A WAC).

National Pollutant Discharge Elimination System (NPDES)--The NPDES (Section 402 of the Clean Water Act) is the Federal wastewater permitting system for discharges to navigable waters of the United States. Many states, including the State of Washington, have been delegated the authority to issue these permits. NPDES permits issued by Washington State permit writers are joint NPDES/State permits issued under both State and Federal laws.

pH--The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Quantitation Level (QL)-- A calculated value five times the MDL (method detection level).

Responsible Corporate Officer-- A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

Technology-based Effluent Limit--A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

State Waters--Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater--That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Upset--An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventative maintenance, or careless or improper operation.

Water Quality-based Effluent Limit--A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

APPENDIX C--TECHNICAL CALCULATIONS

Several of the Excel® spreadsheet tools used to evaluate a discharger's ability to meet Washington State water quality standards can be found on the Department's homepage at <http://www.ecy.wa.gov>.

APPENDIX D--RESPONSE TO COMMENTS

The Department of Ecology (Ecology) has received comments from Mike Vail, Chief Operations Officer of Pacific Coast Shredding. The following is a list of received comments and Ecology response:

GENERAL COMMENTS

Mike Vail:

We received a draft of the permit for our facility and are providing comments for your consideration in preparing the final permit. Following our initial general comment, the comments have been organized by document and section for your ease of review.

We disagree with the approach Washington State Department of Ecology (Ecology) has taken to establish critical conditions for use in the dispersion analysis. We object to the use of the seven day average low river flow with a recurrence interval of ten years (7Q10) in the dispersion analysis. The 7Q10 data are appropriate for use in analyzing continuous discharges such as those from a waste water treatment plant. However for the two reasons outlined below this approach is not appropriate for analysis of the intermittent stormwater discharge found at Pacific Coast Shredding. First, the 7Q10 flow measurements taken during August of 1993, which show a slowing and reversal of the river flow due to tidal influence, would most likely not occur during the months of November through February when most stormwater is produced at the site. In general, the tidal influence on the Columbia would be minimized or non-existent during the rainy season when river flows are much higher. Second, stormwater is stored on site and released at a much slower rate than it accumulates during a storm event. For this reason, the majority of the stormwater leaving the site would be released during normal river flow conditions when the velocities are higher and there is no tidal influence. With this lower release rate coupled with the higher river flows noted above, our analysis shows the outfall will provide two to three times the dilution benefit predicted by Ecology through its application of the August 1993 data.

Ecology:

Ecology disagrees with the general comments for the following reasons:

1. The 7Q10 flow was used for the dispersions analysis according to the Permit Writer's Manual (Ecology, 2002).
2. Stormwater runoff was calculated according to the Permit Writer's Manual (Ecology, 2002).
3. The comment was not substantiated with any numerical analysis.

Action Taken:

None.

FACT SHEET COMMENTS

Mike Vail:

Table 1 - This table does not include data collected on 11/12/02, 12/12/02, 1/22/03, 3/12/03 and 4/3/03. If the interim effluent limitations are based on the limited data previous to these dates, they should be revised to consider all of the available data.

Ecology:

The interim limits were calculated based on the data available when the permit was drafted. Ecology does not have resources to recalculate permit limits whenever the new data is available. All available data will be taken into consideration when the permit is reissued in 2008.

Further, there wasn't data or calculations provided with the comments on draft permit.

Action Taken:

None.

Mike Vail:

Table 7 - The discharge of 0.25 cfs shown under the Chronic Critical Condition is a typographical error - the value should be 0.33 cfs rather than 0.25 cfs. Also, the units for the velocities are incorrect; the units should be m/sec not ft/sec.

Ecology:

Ecology agrees with the comment.

Action Taken:

The said topographical errors have been corrected.

DRAFT PERMIT COMMENTS

Mike Vail:

S1. Discharge Limitations, A. Stormwater Discharges - The interim limits for Oil and Grease should be 35 mg/L (average monthly) and 55 mg/L (maximum daily) to coincide with the values in the Fact Sheet, page 5.

Ecology:

Ecology agrees with the comment.

Action Taken:

The interim limits for Oil and Grease have been revised to coincide with the values in the Fact Sheet.

Mike Vail:

S1. Discharge Limitations, A. Stormwater Discharges, Interim Effluent Limitations

- The maximum daily values for copper, lead, and zinc are set too low for interim values. Pacific Coast Shredding's voluntary stormwater monitoring program has data for each parameter that has exceeded these interim effluent limitations several times over the past three years. Since the interim limitations are provided to allow the permit holder time to develop and implement solutions, these interim values should be adjusted upwards with particular consideration given to data collected following January 3, 2002 not currently factored into Table 1 of the Fact Sheet.

Ecology:

The interim limits were calculated based on the data available when the permit was drafted. Ecology does not have resources to recalculate permit limits whenever the new data is available. All available data will be taken into consideration when the permit is reissued in 2008.

Further, there wasn't data or calculations provided with the comments on draft permit.

Action Taken:

None.

Mike Vail:

S1. Discharge Limitations, A. Stormwater Discharges, Final Effluent Limitations -

The table of Final Effluent Limitations shows a value for Total PCBs of 0.05 micrograms per liter ($\mu\text{g/L}$). The value for this parameter listed in Table 2 for Schnitzer Steel (a comparable facility) is 7 $\mu\text{g/L}$. Since the two facilities conduct similar operations, the effluent limitations should be similar. We propose that the final effluent limitation for PCS be set at 7 $\mu\text{g/L}$.

Ecology:

The final effluent limitation of Total PCBs was calculated based on meeting water quality standards at the edge of a mixing zone. The water quality based limit is always site specific and can not be compared to a limit of another facility discharging to another surface water body that would provide different dilution opportunity.

Action Taken:

None.

Mike Vail:

S1. Discharge Limitations. A. Stormwater Discharges, Footnotes to Effluent Limitations Table - In the third paragraph referencing values for mercury, the QL references lead not mercury. The reference should refer to mercury.

Ecology:

Ecology agrees with the comment.

Action Taken:

The reference has been corrected to refer to mercury.

Mike Vail:

S10. Engineering Report - Almost a year has passed since we proposed that the Engineering Report be completed by September 1, 2004. Now that we have received a better indication of potential final effluent limitations for the site, we would like to propose the Engineering Report due date be changed to September 1, 2005. This will allow PCS to gather more pertinent design data and test potential pollution prevention techniques with the goal of minimizing the size and cost of the treatment system. The schedule for implementing the final effluent limitations (S11, Compliance Schedule) would remain at 12 months following approval of the Engineering Report.

Ecology:

Ecology agrees with the comment.

Action Taken:

Additional time is provided to prepare an engineering report. A submittal date of the engineering report has been changed to September 1, 2005. The schedule implementing the final effluent limitations would remain at 12 months following approval of the engineering report.